

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) An integrated image reading/writing head comprising:
 - a substrate provided with a reading circuit including a plurality of light receiving elements disposed in a row;
 - a case assembled to the substrate and enclosing the light receiving elements;
 - a transparent cover attached to the case, the transparent cover being spaced from and opposed to the substrate and to be tightly contacted by for contact with a document being fed;
 - a light source disposed within the case for illuminating the document;
 - a plurality of lenses disposed within the case for focusing an image of the document illuminated by the light source on the light receiving elements;
 - a plurality of printing elements mounted on the substrate in a row ~~in the same direction as~~ in parallel to the row of light receiving elements; and
 - a writing circuit provided ~~in-on~~ the substrate for controlling the printing elements;
- ~~characterized in~~
 - ~~that wherein~~ the reading circuit, the printing elements and the writing circuit are provided ~~in-on~~ a same surface of the substrate; ~~and~~
 - ~~that wherein~~ the substrate is provided with one connector electrically connected with each of the reading circuit, the printing elements and the writing circuit;
 - wherein the substrate has an elongate edge extending in a predetermined direction;
 - wherein the connector is attached to a longitudinal center portion of the elongate edge;

wherein the surface of the substrate is provided with a common electrode wiring and a common grounding wiring capable of supplying electric power to the printing elements, each of the common electrode wiring and the common grounding wiring having a straight portion extending longitudinally of the substrate, the straight portions of both wirings sandwiching the printing elements;

wherein one of the straight portions having two longitudinal ends connected with the connector; and

wherein the other of the straight portions having a longitudinal center portion connected with the connector.

2. (Currently Amended) The integrated image reading/writing head according to Claim 1, wherein the substrate has a first elongate edge portion and a second elongate edge portion each extending in a said predetermined direction, the first elongate edge portion being ~~uncovered by and on a side of~~ extending beyond the case, the printing elements being mounted on ~~this uncovered part~~ the first elongate edge outside the case.

3. (Currently Amended) The integrated image reading/writing head according to Claim 2, wherein the connector is attached to the second elongate edge portion of the substrate.

4. (Canceled)

5. (Canceled)

6. (Currently Amended) The integrated image reading/writing head according to Claim 1, wherein the reading circuit ~~is constituted by~~ comprises a plurality of sensor IC chips each incorporating an integrated circuit as a unit of the reading circuit, the writing circuit ~~being constituted by~~ comprising a plurality of drive IC chips each incorporating an integrated circuit as a unit of the writing circuit.

7. (Currently Amended) The integrated image reading/writing head according to Claim 1, wherein the reading circuit and the writing circuit ~~are constituted by~~ commonly comprise a plurality of IC chips each incorporating an integrated circuit as a unit of the reading and writing circuits.

8. (Currently Amended) The integrated image reading/writing head according to Claim 7, wherein each of the IC chips is oblong rectangular, having a first edge portion and a second edge portion each extending in a predetermined direction, the first edge portion of the IC chip ~~having a surface provided with~~ carrying the row of light receiving elements ~~in a row~~, the second edge portion ~~having a surface~~ being provided with a plurality of electrode pads for connection with the printing elements.

9. (Currently Amended) The integrated image reading/writing head according to Claim 8, wherein the electrode pads are disposed in a row shorter than the row of the light receiving elements, the second edge portion of each IC chip having two longitudinal edge portions provided with a plurality of signal pads for signal inputting and outputting, sandwiching the electrode pads.

10. (Currently Amended) The integrated image reading/writing head according to Claim 9, wherein the second edge portion of each IC chip is further provided with a plurality of grounding pads.

11. (Original) The integrated image reading/writing head according to Claim 1, wherein the printing elements are heating elements.

12. (Original) The integrated image reading/writing head according to Claim 1, wherein the light source is disposed on said surface of the substrate.

13. (Original) The integrated image reading/writing head according to Claim 12, wherein the light source is electrically connected with the connector.

14. (Currently Amended) An image processing apparatus comprising an integrated image reading/writing head,

the integrated image reading/writing head including:

a substrate provided with a reading circuit including a plurality of light receiving elements disposed in a row;

a case assembled to the substrate and enclosing the light receiving elements;

a transparent cover attached to the case, the transparent cover being spaced from and opposed to the substrate ~~and to be tightly contacted by~~ for contact with a document being fed;

a light source disposed within the case for illuminating the document;

a plurality of lenses disposed within the case for focusing an image of the document illuminated by the light source on the light receiving elements;

a plurality of printing elements mounted on the substrate in a row ~~in the same direction as~~ in parallel to the row of light receiving elements; and

a writing circuit provided ~~in~~ on the substrate for controlling the printing elements;

~~characterized in~~

~~that~~ wherein the reading circuit, the printing elements and the writing circuit are provided ~~in on~~ a same surface of the substrate; ~~and~~

~~that~~ wherein the substrate is provided with one connector electrically connected with each of the reading circuit, the printing elements and the writing circuit;

wherein the substrate has an elongate edge extending in a predetermined direction;

wherein the connector is attached to a longitudinal center portion of the elongate edge;

wherein the surface of the substrate is provided with a common electrode wiring and a common grounding wiring capable of supplying electric power to the printing elements, each of

the common electrode wiring and the common grounding wiring having a straight portion extending longitudinally of the substrate, the straight portions of both wirings sandwiching the printing elements;

wherein one of the straight portions having two longitudinal ends connected with the connector; and

wherein the other of the straight portions having a longitudinal center portion connected with the connector.

15. (Newly Added) An integrated image reading/writing head comprising:
 - a substrate provided with a reading circuit including a plurality of light receiving elements disposed in a row;
 - a case assembled to the substrate and enclosing the light receiving elements;
 - a transparent cover attached to the case, the transparent cover being spaced from and opposed to the substrate for contact with a document being fed;
 - a light source disposed within the case for illuminating the document;
 - a plurality of lenses disposed within the case for focusing an image of the document illuminated by the light source on the light receiving elements;
 - a plurality of printing elements mounted on the substrate in a row parallel to the row of light receiving elements; and
 - a writing circuit provided on the substrate for controlling the printing elements;

wherein the reading circuit, the printing elements and the writing circuit are provided on a same surface of the substrate;

wherein the reading circuit and the writing circuit commonly comprise a plurality of IC chips each incorporating an integrated circuit as a unit of the reading and writing circuits;

wherein each of the IC chips is oblong rectangular, having a first edge portion and a second edge portion each extending in a predetermined direction, the first edge portion of the IC chip carrying the row of light receiving elements, the second edge portion being provided with a plurality of electrode pads for connection with the printing elements; and

wherein the electrode pads are disposed in a row shorter than the row of the light receiving elements, the second edge portion of each IC chip having two longitudinal edge portions provided with a plurality of signal pads for signal inputting and outputting, sandwiching the electrode pads.

16. (Newly Added) The integrated image reading/writing head according to Claim 15, wherein the second edge portion of each IC chip is further provided with a plurality of grounding pads.